

U.S.S.N. 09/435,461

Page 2

First of all the claims are not drawn to an assay. Secondly, the enzymes in the references inherently possess the claimed properties. The enzymes come from the same source as applicant and are the same type of enzyme. Simply because applicant feels that predictability cannot be trusted with the properties of the enzymes in the references, does not negate the value of the references and their inherent properties of the enzymes being one and the same with the claimed enzymes. Applicant has not proven categorically that the enzymes of the references cannot be in any way the same enzymes as in the instant invention, applicant has only cast doubt, which is not enough. The burden is on the applicant to prove that the enzyme in the references is not one and the same as the enzymes instantly claimed.

Applicants respectfully refer the Examiner to Table 1 of the application which illustrates that Applicants have already tested six (6) of the enzymes disclosed in the '237 and '604 applications, namely: *Candida antartica* (2); *Candida rugosa* (2); *Humicola lanuginosa*; and Lipolase™. None of the tested enzymes, as illustrated in Table 1, provided at least 10%, 50% or 100% greater absorbance in a UV and/or MB assay than a control sample without polyesterase.

Accordingly, the Examiner is not correct in stating that the reference enzymes inherently possess the claimed properties. Applicants contend that the results in Table A establish that at least one third of the enzymes in the references do not inherently possess the claimed properties. Additionally, variability is shown between enzymes derived from the same species of organism thereby contradicting the Examiner's inherency statement. As an example, see Table 1 which illustrates two *Candida antartica* lipases, A & B, showing differing results in the DET test; and purified and another strain of *Candida rugosa* also showing differing results in the DET test. None of these four enzymes provided at least 10%, 50% or 100% greater absorbance in a UV and/or MB assay than a control sample without polyesterase. The MB and UV assay criteria for selecting an organism is necessary to determine enzymes having the ability to modify the properties of polyester.

Applicants have discovered that the use of a certain subclass of enzymes, i.e., polyesterase enzymes (enzymes having activity on polyester in the UV Assay or the MB Assay), can have a significant effect in improving the surface properties of polyester. Applicants clearly show in Example 1 that prior methods of determining enzymes for use with polyester were deficient in that they failed to provide meaningful guidelines regarding which enzymes will be effective. Moreover, as shown in Example 2, difficult to adhere chemicals (in this instance dyes) are better adhered after treatment of the polyester substrate with a polyesterase enzyme of the invention. Given that the prior art provides no disclosure or suggestion that enzymatic treatment of polyester would have such a result and further provides no disclosure that an enzyme as

GC593 AFAM

U.S.S.N. 09/435,461

Page 3

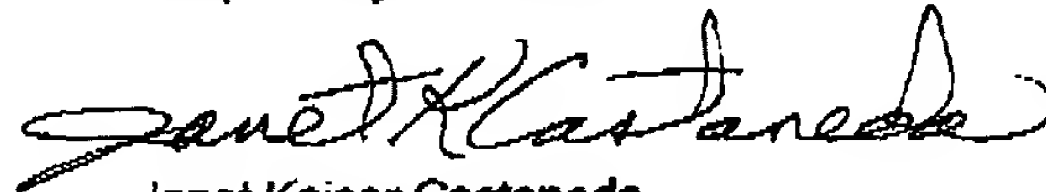
defined herein would be effective in modifying the surface properties of a polyester, Applicants submit that the present invention is both novel and unobvious.

The Examiner has rejected claim 4 under 35 USC §102 or 103 as anticipated by or, in the alternative, obvious over WO 97/27237 or WO 99/01604. It is the Examiner's position that "the references do not state whether there are stains on the fabric or not. Even if they are proven to have stains on them, it would have been obvious to use the claimed invention of fabrics that have stains for many of the purposes as outlined by application with regard to the cited references. Claim 4 has been cancelled to avoid claim duplication in view of claim 21.

The Examiner has rejected claim 18 under 35 USC §103 over WO 97/27237 or WO 99/01604 taken with GB 2307695 for the reasons of record. In view of applicants arguments above related to WO 97/27237 and WO 99/01604, applicants respectfully request withdrawal of the rejection of dependent claim 18. Claim 18 depends from claim 1 and none of the cited references, alone or in combination, teach an enzyme that provides at least 10%, 50% or 100% greater absorbance in a UV and/or MB assay than a control sample without polyesterase and modifies the properties of polyester as in claim 1.

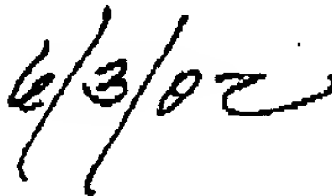
For these reasons, as outlined above, Applicants respectfully request that the present rejections be withdrawn and that the claims be permitted to proceed to allowance.

Respectfully submitted,



Janet Kaiser Castaneda  
Registration No. 33,228

Date:



**Correspondence Address:**

Genencor International, Inc.  
925 Page Mill Road  
Palo Alto, CA 94304  
Phone: (650) 846-4072  
FAX: (650) 845-6504

GC593 AFAM

Received from < 650 845 6504 > at 6/3/02 4:53:25 PM [Eastern Daylight Time]